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Perspectives in Disease Prevention and Health Promotion

Report of the Secretary's Task Force on Black and Minority Health

In January 1984, the secretary of the U.S. Department of Health and Human Services (DHHS) established the Task Force on Black and Minority Health in response to the national paradox of steady improvement in overall health, with substantial inequities in the health of U.S. minorities. DHHS released its *Report of the Secretary's Task Force on Black and Minority Health* on October 16, 1985. The report documents the disparity in key health indicators among certain groups of the U.S. population.

A comprehensive study was carried out to investigate the long-standing disparities between the health status of U.S. blacks, Hispanics, Asian/Pacific Islanders, and Native Americans compared to that of whites. To characterize the health problems of minority Americans, the Task Force reviewed existing health status information on minority and nonminority populations available in *Health, United States, 1983* and other supplementary data sources (*1-10*). National mortality data were analyzed for more than 40 disease categories for 1979-1981. "Excess deaths" were defined as the difference between the number of deaths observed in the minority populations and the number that would have been expected if the minority population had the same age- and sex-specific death rates as the nonminority population. This method quantified the number of deaths that would not have occurred had mortality rates for minorities equaled those of nonminorities.

For each of the major causes of death identified as priority areas, the Task Force formed a subcommittee to consider and report on the etiology; associated physiologic, cultural, and societal factors; means for improving treatment; and possible intervention strategies to prevent excess deaths in minority groups. The Task Force also developed other mortality indices (such as person-years of life lost, life expectancy, and relative risk of death by cause), as well as indices of morbidity and health status for minorities (such as prevalence rates of selected diseases, hospital admissions, physician visits, limitation of activity, and self-assessed health status). It also reviewed other factors pertaining to minority health, including demographic data, health education, health professionals, and health-care services and financing.

In discharging its responsibility, the Task Force engaged consultants from the various racial/ethnic groups and others to provide additional information and perform supplementary reviews of data. It also interacted with various private organizations and associations and commissioned research papers on some issues.

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The Task Force found that 60,000 excess deaths occur each year in minority populations (Table 1). Six causes of death were identified that together account for more than 80% of the excess mortality. The ranking of these health problems according to excess deaths differs for each minority population; the problems are listed here in alphabetical order, with some examples of excess mortality rates observed in different minority groups:

Cancer. Cancer accounts for 16% of excess mortality among black males under age 70 years and 10% for black females.

Cardiovascular disease and stroke. Cardiovascular diseases account for 24% of excess mortality among black males and 41% among black females.

Chemical dependency, measured by deaths due to cirrhosis. Cirrhosis of the liver, which is associated with excessive use of alcohol, accounts for 13% of excess mortality among Native American males and 22% among Native American females under age 70 years.

Diabetes. Diabetes accounts for 38% of excess deaths among Mexican-born Hispanic females.

Homicides and accidents (unintentional injuries). Homicides account for 60% of excess mortality among Hispanics under 65 years of age. Unintentional injuries account for 44% of excess deaths among male, and 30% among female, Native Americans. Homicides and unintentional injuries account for 19% of excess mortality among black males under age 70 years and 38% for those under age 45 years. For black females, the disparities are somewhat less—6% and 14%, respectively. A substantial proportion of excess deaths due to homicide and unintentional injury may be associated with excessive use of alcohol and other drugs.

Infant mortality. Of excess deaths among black females up to age 45 years, death in the first year of life accounts for 35% of that excess.

TABLE 1. Average annual excess* and total deaths in minority populations up to age 70 years, by selected causes, by sex — United States, 1979-1981

Cause of mortality	Males				Females			
	Black	Mexican-born†	Native American	Asian	Black	Mexican-born*	Native American	Asian
Cardiovascular disease	8,469	-362	-165	-1,059	9,712	-39	-21	-408
Cancer	5,782	-288	-243	-471	2,269	-145	-182	-450
Cirrhosis	1,362	-30	144	-117	782	-62	124	-65
Infant mortality	3,317	-76	49	-105	2,861	-26	53	-57
Diabetes	646	-2	31	-21	1,203	12	47	-22
Injuries	1,113	553	469	-523	134	-2	168	-119
Homicide	6,708	701	88	-39	1,381	20	31	1
Total	**35,112**	**423**	**670**	**-2,901**	**23,545**	**-263**	**372**	**-1,373**

*Excess mortality may be negative where observed mortality was less than that seen in whites. The numbers for Native Americans and Asian/Pacific Islanders, however, are based on much smaller denominators than the other populations and therefore are more subject to error.

†Figures given here represent only one subgroup within the Hispanic population for which mortality data were available. Comparable data on other Hispanic subgroups were not available or were incomplete.

Black and Minority Health — Continued

The relative ratio of average age-adjusted, sex-specific mortality in minority populations, compared to that in the nonminority population, by selected cause, suggests the relative importance of specific health problems within each group (Table 2).

One of the Task Force's major concerns was the quality of available data, especially on Hispanics (Tables 1 and 2). For example, for the Hispanic population, separate mortality data are only available on those who are foreign-born. Mortality data for the Asian-American population reflect predominantly the longer established subpopulations of Chinese, Japanese, and Filipino ancestry much more than recent immigrants.

The Task Force made eight main recommendations to the Secretary, each of which was followed by several specific suggestions:

1. Implement an outreach campaign, specifically designed for minority populations, to disseminate targeted health information, educational materials, and program strategies.
2. Increase patient education by developing materials and programs responsive to minority needs and by improving provider awareness of minority cultural and language needs.
3. Improve the access, delivery, and financing of health services to minority populations through increased efficiency and acceptability.
4. Develop strategies to improve the availability and accessibility of health professionals to minority communities through communication and coordination with nonfederal entities.
5. Promote and improve communication and coordination among federal agencies in administering existing programs for improving the health status and availability of health professionals to minorities.
6. Provide technical assistance and encourage efforts by local and community agencies to meet minority-health needs.
7. Improve the quality, availability, and use of health data pertaining to minority populations.

TABLE 2. Relative ratio of average age-adjusted mortality in minority populations up to age 70 years, by selected causes, by sex — United States, 1979-1981

Cause of mortality	Males				Females			
	Black	Mexican-born*	Native American	Asian	Black	Mexican-born*	Native American	Asian
Cardiovascular disease	1.5	0.6	0.8	0.5	2.2	0.9	0.9	0.6
Cancer	1.6	0.5	0.5	0.7	1.2	0.7	0.5	0.6
Cirrhosis	2.0	1.2	3.2	0.4	2.1	0.9	4.9	0.3
Infant mortality†	2.0	0.1	1.2	0.7	2.1	0.1	1.3	0.8
Diabetes	2.2	0.9	2.2	0.7	3.1	1.4	3.1	0.7
Injuries	1.2	1.7	2.1	0.5	1.1	1.0	2.3	0.6
Homicide	6.5	5.8	2.3	0.8	4.3	1.6	2.5	1.0
Total	**1.7**	**1.1**	**1.3**	**0.6**	**1.8**	**0.9**	**1.3**	**0.6**

*Figures given here represent only one subgroup within the Hispanic population for which mortality data were available. Comparable data on other Hispanic subgroups were not available or were incomplete.

†Infant mortality data for those who were foreign-born are not representative, since infant deaths before emigration are excluded.

Black and Minority Health — Continued

8. Adopt and support research to investigate factors affecting minority health, including risk-factor identification, education interventions, and prevention and treatment services.

Reported by Office of the Director, CDC.

Editorial Note: The *Report of the Secretary's Task Force on Black and Minority Health* represents a significant step in the process of establishing a consensus on the major health problems affecting minority Americans. The first volume of the 10-volume Task Force Report summarizes the data on minority-health problems and recommendations to address the disparities between minority and nonminority populations. Subsequent volumes will contain a more complete discussion of selected topics prepared by the subcommittees.

Recommendations were intended to emphasize the following principles: (1) incorporate minority health initiatives into existing DHHS programs to address health conditions amenable to immediate improvement; (2) press for greater public and private involvement in a common effort to eliminate the health disparity; (3) resolve unanswered questions through a concerted program of research and data collection; and (4) seek new strategies to minimize health inequities between minorities and nonminorities. The recommendations propose activities for a coordinated effort by which DHHS may redirect some of its resources to address the demonstrated disparity in health status between minority and nonminority populations. In addition to expertise and experience in the areas studied, the senior scientists and officials from DHHS selected as primary members of the Task Force have programmatic authority that enhances the opportunity to implement recommendations of the Task Force. A special office (Office of Minority Health) has been established in DHHS to manage the implementation of the recommendations. Copies of the executive summary of the report may be requested from Health Information Clearing House, P.O. Box 1133, Washington, D.C. 20013-1133: telephone (800) 336-4797 (in Virginia: [703] 522-2590).

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Leading Work-Related Diseases and Injuries—United States

The National Institute for Occupational Safety and Health (NIOSH) has developed a list of 10 leading work-related diseases and injuries. The first six categories have been described previously (1-6); *a discussion of the seventh category, Neurotoxic Disorders, appears below.*

NEUROTOXIC DISORDERS

Background. Diseases of the nervous system resulting from toxic exposures in the workplace were known as early as the first century A.D., when Pliny identified palsy as a manifestation of lead poisoning among workers exposed to lead dust (*7*). In 1557, Jean Fernel linked gingival pigmentation, tremor, and behavioral changes to occupational mercury poisoning (*8*); in the nineteenth century, Delpech recognized rubber processing as the cause of the bizarre psychoses occurring among French workers who manufactured condoms and balloons in small cottage industries. Later, carbon disulfide was implicated as the specific neurotoxic agent (*9*).

Industrial hygiene practices have improved in the twentieth century, and some animal models of neurotoxic disease have been developed. In addition, workers who become ill often draw attention to outbreaks of neurotoxic diseases. Despite the prior identification of acrylamide as neurotoxic in animals, its neurotoxicity in humans was first recognized in the 1950s, when several Japanese workers involved in a pilot production project developed peripheral neuropathy (*10*). During the 1960s and early 1970s, dozens of cases of neuropathy occurred among Japanese and Italian workers exposed to solutions containing *n*-hexane during the manufacture of shoes (*11*). Subsequently, high doses of *n*-hexane were found to be neurotoxic in exposed animals. In the past 15 years alone, outbreaks of serious human neurotoxicity occurred among workers exposed to three substances not previously known to be neurotoxic: the chlorinated hydrocarbon, chlordecone, which caused opsoclonus, tremor, disturbances of gait, and changes in personality (*12*); and two hexacarbons, methyl-*n*-butyl ketone and 2-t-butylazo-2-hydroxy-5-methylhexane, both of which caused a predominantly peripheral neuropathy (*13,14*).

Nature of Neurotoxic Disorders. Neurotoxic disorders are on the NIOSH list of Ten Leading Work-Related Diseases and Injuries (*1*) because of their potential severity—as exemplified by the neurotoxicity of chlordecone—and because of the large number of workers potentially at risk. A conservative estimate of the workers exposed full time to one or more neurotoxic agents is 7.7 million (*15*). The number of potentially neurotoxic chemicals found in the workplace exceeds 850; an abbreviated list of the more commonly used of these chemicals is shown in Table 3 (*16*).

Clinically, symptoms and signs of neurotoxicity can be diverse. Depending on the intensity of exposure, the molecular configuration of the agent, and the mechanism of toxicity, either central or peripheral neurologic effects may predominate. Most neurotoxic chemicals, however, affect both the central and peripheral nervous systems. Because the symptoms of peripheral neuropathy are more specific and the nerves themselves more directly accessible to precise diagnostic examinations, the effects of neurotoxic agents on the peripheral nervous system are usually more easily identified than effects on the central nervous system (CNS). Early symptoms of peripheral neuropathy may include numbness, tingling, or pain in the feet or hands. As the disease progresses, clumsiness or incoordination due to both sensory and motor changes may develop. Production workers may find their ability to do usual work partially or fully impaired. Chemicals used extensively in industry, which cause peripheral neu-

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ropathy when present in sufficiently high and persistent concentrations, include: lead, *n*-hexane, acrylamide, carbon disulfide, mercury, and methyl bromide (*17,18*) (Table 4). Several chemicals are known to cause selective impairment of cranial-nerve function, including dysfunction of the fifth cranial nerve (trichloroethylene) (*18*).

The effects of neurotoxic agents on the CNS present a far wider range of disturbances (*16,18,19*) (Table 5). At times, the most striking effects are changes in mood and personality (*20*). High levels of exposure to manganese or carbon disulfide produce psychoses and suicidal tendencies. Delusions and hallucinations may result from exposure to high concentrations of solvents, such as methylene chloride. Manifestations of cognitive dysfunction, such as reduced attention span, lack of alertness, and memory loss, are prominent neurotoxic effects that may occur in addition to personality changes after exposure to many solvents and to asphyxiants, such as carbon monoxide. Other neurologic effects occur under certain restricted conditions of exposure to unique chemical substances (Table 6).

Although research into the neurobehavioral effects of industrial chemicals is relatively new, early results suggest that occupational neurotoxicity may be a larger problem than previously suspected. Sensitive methods for evaluating subtle losses in cognitive function have only recently been applied to the evaluation of exposed workers. Because of the complexity of the nervous system and the variety of potentially neurotoxic exposures, the true scope of this health hazard in the workplace is unknown.

Reported by Div of Biomedical and Behavioral Science, Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

Editorial Note: Studies of the neurotoxicity of workplace chemicals demonstrate the problems encountered in recognizing occupational disease in general. Despite occasional large and dramatic outbreaks of neurotoxic disorders, such as those mentioned above, more often small numbers of workers in many workplaces are chronically exposed to neurotoxic agents

TABLE 3. Commonly used industrial chemicals recognized as neurotoxic

Acetyl ethyl tetramethyl tetralin	Cobalt	Methyl *n*-butyl ketone
Acetyl pyridine	Cuprizone	Nickel (carbonyl)
Acrylamide	Cyanide	Nitrogen trichloride
Adiponitrile	2,4-Dichlorophenoxy acetic acid (2,4-D)	Organochlorine insecticides
Alkyl phosphates	Dichlorodiphenyl tri chloroethane (DDT)	Organophosphate esters
Aluminum	Diethyl ether	Organotins (triethyltin)
Aniline	Diisopropyl fluorophosphate (DFP)	Paraquat
Arsenic, inorganic	Dimethyl sulphate	Phenol
Arsine	Ethylene dichloride	Phenyl mercury
Aryl phosphates	Hexachlorophene	Phthalate esters
Azide	*n*-Hexane	Polybrominated biphenyls (PBB's)
Barium	Hydroquinone	Selenium
Benzene	Lead	Styrene
Boron	Lead, tetraethyl	Sulfur dioxide
p-Bromophenyl acetylurea	Leptophos	Tetrachlorobiphenyl
Cadmium	Malonitrile	Thallium
Carbon disulfide	Manganese	Toluene
Carbon monoxide	Mercury	Trichloroethylene
Carbon tetrachloride	Methanol	Triorthocresylphosphate (TOCP)
Chlordane	Methyl bromide	Vanadium, inorganic salt
Chlordecone	Methyl chloride	Zinc
Chloroprene		Zinc pyridinethione

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that subtly and slowly alter nervous-system functions. Several neurotoxic syndromes mimic diseases of nonoccupational and "idiopathic" etiology, e.g., the toxic axonopathy associated with exposure to various metals and solvents, the parkinsonian syndrome of chronic intoxication with manganese, and the organic brain syndrome of chronic solvent intoxication. Because of these similarities to other nonoccupational diseases, such cases are frequently not identified as occupational in origin. In addition, many physicians are not trained to take an adequate occupational medical history (*21*). For these reasons, the prevalence of occupational neurologic disease is unknown, and important causal relationships between chemicals and disease remain obscure.

The prevention of neurotoxicity among workers will require strategies such as those suggested in the 1990 objectives for improving the nation's health (*22*), developed by the U.S. Public Health Service: (1) analyses of structural analogues of known neurotoxic agents in an effort to predict the neurotoxicity of untested chemicals; (2) continuing search for animal models of disease; (3) ongoing research in establishing an acceptable human exposure level for identified neurotoxic agents; (4) epidemiologic evaluations of suspected neurotoxicity; (5) development of simple screening tools for use on asymptomatic populations exposed to known neurotoxic agents; and (6) premanufacture and premarket testing of new chemicals as required by the Toxic Substances Control Act (*23*). As in the prevention of other work-related diseases, however, the most direct and effective method for preventing neurotoxic illness will continue to be the environmental control of exposures to neurologic chemicals. Such efforts as the substitution of less toxic substances where possible, engineering controls, teaching appropriate work practices, and educating workers about the potential neurotoxicity of chemicals will aid a comprehensive prevention effort.

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TABLE 4. Examples of peripheral neuropathies associated with occupational toxins

Type of neuropathy	Toxin	Comments
Motor	Lead	Wrist extensors primarily involved; wrist and ankle drop are rare.
Mixed sensorimotor	Acrylamide	Ataxia; desquamation of hands and soles; sweating of palms.
	Arsenic	Early distal paresthesias; pain in limbs, especially calves; hyperpathia of feet; weakness prominent in legs.
	Carbon disulfide	Peripheral neuropathy rather mild; CNS effects more important.
	Carbon monoxide	After severe intoxication.
	DDT	Only with ingestion.
	n-Hexane, methyl *n*-Butyl ketone	Distal paresthesias, motor weakness; weight loss, fatigue, and muscle cramps.
	Mercury	Predominantly distal sensory involvement; more common with alkyl mercury exposure.

Work-Related Diseases and Injuries — Continued

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TABLE I. Summary—cases specified notifiable diseases, United States

Disease	8th Week Ending			Cumulative, 8th Week Ending		
	Feb. 22, 1986	Feb. 23 1985	Median 1981-1985	Feb. 22 1986	Feb. 23 1985	Median 1981-1985
Acquired Immunodeficiency Syndrome (AIDS)	224	92	N	1,804	878	N
Aseptic meningitis	80	80	73	633	553	655
Encephalitis: Primary (arthropod-borne & unspec.)	16	19	19	119	120	123
Post-infectious	-	2	1	7	18	11
Gonorrhea: Civilian	13,289	15,233	16,561	117,512	119,548	141,048
Military	398	315	344	2,272	2,448	3,829
Hepatitis: Type A	397	461	527	3,333	3,075	3,427
Type B	388	518	479	3,290	3,533	3,341
Non A, Non B	53	87	N	409	572	N
Unspecified	75	57	167	747	618	1,046
Legionellosis	8	10	N	78	99	N
Leprosy	-	11	5	31	44	34
Malaria	13	19	19	90	102	102
Measles: Total*	249	27	28	399	112	112
Indigenous	246	27	N	390	79	N
Imported	3	-	N	9	33	N
Meningococcal infections: Total	63	86	86	444	447	489
Civilian	63	86	86	444	447	489
Military	-	-	-	-	-	1
Mumps	65	102	99	369	494	603
Pertussis	34	36	36	290	189	178
Rubella (German measles)	3	4	22	51	30	124
Syphilis (Primary & Secondary): Civilian	389	507	669	3,470	3,772	4,661
Military	6	-	7	28	26	64
Toxic Shock syndrome	4	14	N	35	62	N
Tuberculosis	377	347	416	2,501	2,425	2,999
Tularemia	1	3	2	12	19	13
Typhoid fever	7	6	9	31	39	60
Typhus fever, tick-borne (RMSF)	-	-	-	7	4	8
Rabies, animal	52	97	109	546	609	664

TABLE II. Notifiable diseases of low frequency, United States

	Cum 1986		Cum 1986
Anthrax	-	Leptospirosis (Iowa 1)	8
Botulism: Foodborne (Calif. 1)	3	Plague	-
Infant (Calif. 1)	7	Poliomyelitis, Paralytic	-
Other	-	Psittacosis	4
Brucellosis (Mo. 1)	6	Rabies, human	-
Cholera	-	Tetanus (S. Dak. 1)	5
Congenital rubella syndrome	1	Trichinosis	7
Congenital syphilis, ages < 1 year	-	Typhus fever, flea-borne (endemic, murine)	1
Diphtheria	-		

*Three of the 249 reported cases for this week were imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending February 22, 1986 and February 23, 1985 (8th Week)

Reporting Area	AIDS	Aseptic Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionellosis	Leprosy
			Primary	Post-infectious			A	B	NA,NB	Unspecified		
	Cum. 1986	1986	Cum. 1986	Cum. 1986	Cum. 1986	Cum. 1985	1986	1986	1986	1986	1986	Cum. 1986
UNITED STATES	1,804	80	119	7	117,512	119,548	397	388	53	75	8	31
NEW ENGLAND	96	4	7	-	2,894	3,651	6	28	2	3	2	1
Maine	3	-	-	-	137	167	1	4	1	-	-	-
N.H	3	-	2	-	88	77	-	-	-	-	-	-
Vt	1	-	2	-	45	37	2	-	-	-	-	-
Mass	57	2	2	-	1,261	1,208	2	15	1	3	1	1
R.I	9	-	-	-	274	295	-	3	-	-	1	-
Conn	23	2	1	-	1,089	1,867	1	6	-	-	-	-
MID ATLANTIC	653	7	19	-	20,330	17,416	23	20	1	3	-	4
Upstate N.Y	49	2	6	-	2,274	2,114	12	4	-	-	-	-
N.Y. City	432	-	7	-	12,430	7,778	-	-	-	-	-	4
N.J.	122	-	2	-	2,072	3,326	7	10	1	3	-	-
Pa.	50	5	4	-	3,554	4,198	4	6	-	-	-	-
E.N. CENTRAL	80	7	21	1	15,805	17,432	12	15	-	3	2	1
Ohio	27	4	6	1	4,606	4,599	6	9	-	1	-	-
Ind.	15	U	-	-	2,440	1,347	U	U	U	U	U	-
Ill.	17	-	1	-	2,222	5,618	-	-	-	-	-	-
Mich.	21	3	14	-	5,482	4,995	6	6	-	2	2	1
Wis.	-	-	-	-	1,055	873	-	-	-	-	-	-
W.N. CENTRAL	39	2	-	1	5,667	6,383	16	21	2	-	-	1
Minn.	19	1	-	-	809	1,020	2	1	-	-	-	1
Iowa	2	1	-	-	606	689	-	3	2	-	-	-
Mo.	10	-	-	-	2,745	2,828	3	13	-	-	-	-
N. Dak.	2	-	-	-	63	38	2	-	-	-	-	-
S. Dak.	1	-	-	-	93	123	5	-	-	-	-	-
Nebr.	3	-	-	-	309	623	4	4	-	-	-	-
Kans.	2	-	-	1	1,042	1,062	-	-	-	-	-	-
S. ATLANTIC	219	23	24	5	25,459	24,787	25	82	12	4	4	-
Del.	5	-	2	-	527	534	1	-	-	-	-	-
Md.	24	1	8	-	3,647	3,479	4	11	2	1	2	-
D.C.	21	1	-	-	2,488	2,110	-	1	-	-	-	-
Va.	31	6	11	-	2,771	2,674	2	4	6	-	-	-
W. Va.	-	1	-	-	347	345	-	2	-	-	1	-
N.C.	16	1	2	-	4,198	5,016	-	7	1	1	1	-
S.C.	11	4	-	-	2,988	3,191	-	12	-	-	-	-
Ga.	16	-	-	-	-	-	2	13	-	-	-	-
Fla.	95	9	1	5	8,493	7,438	16	32	3	2	-	-
E.S. CENTRAL	23	8	12	-	10,556	10,603	7	39	2	4	-	-
Ky.	5	2	6	-	1,223	1,098	3	1	1	-	-	-
Tenn.	12	1	1	-	4,257	4,225	2	26	-	1	-	-
Ala.	2	4	5	-	2,756	3,228	1	9	1	2	-	-
Miss.	4	1	-	-	2,320	2,052	1	3	-	1	-	-
W.S. CENTRAL	170	6	7	-	15,893	17,724	36	22	7	15	-	-
Ark.	6	-	-	-	1,527	1,770	1	1	-	-	-	-
La.	26	-	-	-	2,884	3,668	-	6	-	-	-	-
Okla.	2	1	1	-	1,807	1,840	6	5	2	4	-	-
Tex.	136	5	6	-	9,675	10,446	29	10	5	11	-	-
MOUNTAIN	58	2	5	-	3,502	3,991	38	27	4	9	-	2
Mont.	-	-	-	-	96	115	3	1	-	1	-	-
Idaho	1	-	-	-	104	128	-	1	-	-	-	-
Wyo.	2	-	2	-	83	107	1	-	-	-	-	-
Colo.	34	1	-	-	996	1,166	5	6	1	2	-	-
N. Mex.	4	-	-	-	422	475	9	3	-	-	-	-
Ariz.	6	1	2	-	903	1,197	11	7	1	2	-	1
Utah	5	-	1	-	172	179	1	-	1	4	-	-
Nev.	6	-	-	-	726	624	8	9	1	-	-	1
PACIFIC	466	21	24	-	17,406	17,561	234	134	23	34	-	22
Wash.	21	2	1	-	1,324	1,329	7	10	1	1	-	1
Oreg.	10	-	-	-	683	1,024	76	11	3	-	-	-
Calif.	427	19	21	-	14,664	14,533	150	108	18	33	-	21
Alaska	4	-	2	-	557	409	1	5	-	-	-	-
Hawaii	4	-	-	-	178	266	-	-	1	-	-	-
Guam	-	U	-	-	-	19	U	U	U	U	U	-
P.R.	16	2	2	-	340	678	-	6	-	-	-	-
V.I.	-	-	-	-	32	57	-	-	-	-	-	-
Pac. Trust Terr.	-	U	-	-	-	146	U	U	U	U	U	-
Amer. Samoa	-	U	-	-	-	-	U	U	U	U	U	-

N: Not notifiable U: Unavailable

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending February 22, 1986 and February 23, 1985 (8th Week)

Reporting Area	Malaria	Measles (Rubeola)					Menin-gococcal Infections	Mumps		Pertussis			Rubella		
		Indigenous		Imported *		Total									
	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	Cum. 1986	1986	Cum. 1986	1986	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985
UNITED STATES	90	246	390	3	9	112	444	65	369	34	290	189	3	51	30
NEW ENGLAND	4	5	5	-	-	-	37	-	6	8	24	8	-	-	2
Maine	-	-	-	-	-	-	7	-	-	1	2	2	-	-	-
N.H.	-	-	-	-	-	-	1	-	3	-	7	2	-	-	1
Vt.	-	-	-	-	-	-	6	-	-	-	1	1	-	-	-
Mass.	3	5	5	-	-	-	7	-	-	4	8	2	-	-	1
R.I.	-	-	-	-	-	-	3	-	3	-	1	1	-	-	-
Conn.	1	-	-	-	-	-	13	-	-	3	5	-	-	-	-
MID ATLANTIC	11	163	174	-	2	2	71	6	25	-	40	34	-	15	6
Upstate N.Y.	-	-	-	-	2	1	20	1	8	-	31	15	-	12	1
N.Y. City	5	-	11	-	-	1	8	-	-	-	-	5	-	3	4
N.J.	2	163	163	-	-	-	8	5	12	-	-	-	-	-	1
Pa.	4	-	-	-	-	-	35	-	5	-	9	14	-	-	-
E.N. CENTRAL	2	-	25	-	-	42	50	28	159	3	70	45	-	1	4
Ohio	1	-	-	-	-	-	23	2	34	2	38	8	-	-	-
Ind.	-	U	-	U	-	-	6	U	7	U	9	11	U	-	-
Ill.	-	-	16	-	-	4	10	24	70	-	2	8	-	-	-
Mich.	1	-	-	-	-	12	11	2	29	1	7	2	-	-	4
Wis.	-	-	9	-	-	26	-	-	19	-	14	16	-	1	-
W.N. CENTRAL	2	1	43	-	-	-	20	1	15	-	17	19	-	2	4
Minn.	1	-	-	-	-	-	4	-	-	-	10	9	-	-	-
Iowa	1	-	-	-	-	-	4	-	5	-	2	1	-	-	-
Mo.	-	-	-	-	-	-	9	-	3	-	1	3	-	1	-
N. Dak.	-	-	-	-	-	-	-	1	1	-	1	2	-	-	-
S. Dak.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nebr.	-	-	-	-	-	-	1	-	-	-	-	1	-	-	-
Kans.	-	1	43	-	-	-	2	-	6	-	3	3	-	1	4
S. ATLANTIC	16	20	44	-	1	3	89	6	43	9	52	29	1	5	1
Del.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Md.	3	-	-	-	-	1	9	-	3	3	13	4	-	-	-
D.C.	-	-	-	-	-	1	2	-	-	-	-	-	-	-	-
Va.	5	-	-	-	-	-	8	-	5	1	6	1	-	-	-
W. Va.	-	-	-	-	-	-	1	1	16	-	-	-	-	-	-
N.C.	2	-	-	-	-	-	10	1	4	4	10	6	-	-	-
S.C.	-	14	37	-	-	-	16	1	3	-	1	-	-	-	1
Ga.	2	-	-	-	-	-	12	1	3	-	17	8	-	-	-
Fla.	4	6	7	-	1	1	31	2	9	1	5	10	1	5	-
E.S. CENTRAL	2	-	-	-	-	-	25	-	4	-	8	3	-	1	1
Ky.	2	-	-	-	-	-	6	-	2	-	1	1	-	1	1
Tenn.	-	-	-	-	-	-	10	-	1	-	2	1	-	-	-
Ala.	-	-	-	-	-	-	8	-	1	-	5	1	-	-	-
Miss.	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-
W.S. CENTRAL	2	22	22	-	-	-	22	3	26	7	14	12	-	6	1
Ark.	-	21	21	-	-	-	-	-	2	-	-	6	-	-	1
La.	-	-	-	-	-	-	2	-	-	1	1	-	-	-	-
Okla.	1	-	-	-	-	-	5	N	N	6	13	6	-	-	-
Tex.	1	1	1	-	-	-	15	3	24	-	-	-	-	6	-
MOUNTAIN	4	20	29	2	4	42	25	12	51	4	33	6	-	-	1
Mont.	-	-	-	-	-	42	4	-	1	-	-	-	-	-	-
Idaho	-	-	-	-	-	-	1	1	2	-	7	-	-	-	-
Wyo.	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-
Colo.	1	-	-	2 †	2	-	3	-	3	3	9	2	-	-	-
N. Mex.	-	4	13	-	2	-	4	N	N	1	6	1	-	-	-
Ariz.	2	15	15	-	-	-	7	10	41	-	10	1	-	-	1
Utah	-	-	-	-	-	-	2	-	1	-	1	2	-	-	-
Nev.	1	1	1	-	-	-	2	1	3	-	-	-	-	-	-
PACIFIC	47	15	48	1	2	23	105	9	40	3	32	33	2	21	10
Wash.	5	9	18	1 †	1	1	15	2	3	1	14	3	-	-	-
Oreg.	5	-	-	-	-	-	10	N	N	1	2	4	-	-	-
Calif.	37	4	27	-	1	18	76	7	32	1	13	24	2	21	10
Alaska	-	-	-	-	-	-	4	-	2	-	1	-	-	-	-
Hawaii	-	2	3	-	-	4	-	-	3	-	2	2	-	-	-
Guam	-	U	-	U	-	8	-	U	-	U	-	-	U	-	1
P.R.	1	-	-	-	-	20	1	-	8	-	2	1	-	-	4
V.I.	-	-	-	-	-	6	-	-	2	-	-	-	-	-	-
Pac. Trust Terr.	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-
Amer. Samoa	-	U	-	U	-	-	-	U	-	U	-	-	U	-	-

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable †International §Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending February 22, 1986 and February 23, 1985 (8th Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic-shock Syndrome	Tuberculosis		Tula-remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1986	Cum. 1985	1986	Cum. 1986	Cum. 1985	Cum. 1986	Cum. 1986	Cum. 1986	Cum. 1986
UNITED STATES	3,470	3,772	4	2,501	2,425	12	31	7	546
NEW ENGLAND	87	83	-	83	93	-	1	1	-
Maine	4	2	-	10	3	-	-	-	-
N.H.	3	2	-	2	6	-	-	-	-
Vt.	4	-	-	5	-	-	-	-	-
Mass	46	45	-	36	55	-	1	1	-
R.I.	5	1	-	4	13	-	-	-	-
Conn.	25	33	-	26	16	-	-	-	-
MID ATLANTIC	467	501	-	493	521	-	2	-	72
Upstate N.Y.	23	26	-	86	69	-	-	-	11
N.Y. City	308	331	-	233	294	-	2	-	-
N.J.	115	90	-	89	28	-	-	-	-
Pa.	21	54	-	85	130	-	-	-	61
E.N. CENTRAL	83	191	1	363	299	1	3	-	7
Ohio	17	16	1	49	62	1	-	-	-
Ind.	24	10	U	36	36	-	-	-	1
Ill.	18	119	-	175	127	-	-	-	-
Mich.	14	38	-	81	57	-	3	-	2
Wis.	10	8	-	22	17	-	-	-	4
W.N. CENTRAL	34	44	2	44	55	4	2	-	64
Minn.	6	18	-	8	7	-	1	-	-
Iowa	3	7	-	5	13	1	-	-	18
Mo.	18	11	1	24	20	3	1	-	6
N. Dak.	2	-	-	3	2	-	-	-	27
S. Dak.	-	1	1	-	2	-	-	-	13
Nebr.	2	1	-	2	3	-	-	-	-
Kans.	3	6	-	2	8	-	-	-	-
S. ATLANTIC	896	951	-	492	484	2	2	3	97
Del.	4	6	-	2	6	-	-	-	-
Md.	66	72	-	31	38	1	-	-	52
D.C.	54	47	-	23	23	-	-	-	-
Va.	72	49	-	32	27	-	-	-	15
W. Va.	3	1	-	18	13	-	-	-	3
N.C.	96	117	-	63	52	-	2	2	-
S.C.	122	122	-	70	64	-	-	1	4
Ga.	-	-	-	51	73	1	-	-	18
Fla.	479	537	-	202	188	-	-	-	5
E.S. CENTRAL	240	369	-	229	203	2	-	2	25
Ky.	18	12	-	64	48	1	-	1	5
Tenn.	94	73	-	54	50	1	-	-	11
Ala.	84	131	-	94	83	-	-	1	9
Miss.	44	153	-	17	22	-	-	-	-
W.S. CENTRAL	823	909	-	286	203	3	-	1	58
Ark.	30	60	-	34	11	3	-	-	9
La.	144	164	-	83	41	-	-	-	-
Okla.	25	31	-	27	28	-	-	-	7
Tex.	624	654	-	142	123	-	-	1	42
MOUNTAIN	94	127	-	44	38	-	1	-	131
Mont.	1	1	-	1	5	-	-	-	56
Idaho	1	2	-	2	1	-	-	-	-
Wyo.	-	4	-	-	1	-	-	-	54
Colo.	30	32	-	-	-	-	-	-	-
N. Mex.	10	17	-	13	5	-	-	-	2
Ariz.	37	66	-	18	22	-	-	-	19
Utah	3	1	-	-	1	-	1	-	-
Nev.	12	4	-	10	3	-	-	-	-
PACIFIC	746	597	1	467	529	-	20	-	92
Wash.	16	23	-	25	21	-	2	-	-
Oreg.	20	19	-	22	15	-	-	-	-
Calif.	702	545	1	387	446	-	16	-	89
Alaska	-	-	-	5	18	-	-	-	3
Hawaii	8	10	-	28	29	-	2	-	-
Guam	-	2	U	-	5	-	-	-	-
P.R.	120	153	-	43	45	-	-	-	5
V.I.	-	-	-	-	1	-	-	-	-
Pac. Trust Terr.	-	13	U	-	16	-	-	-	-
Amer. Samoa	-	-	U	-	-	-	-	-	-

U Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending February 22, 1986 (8th Week)

Reporting Area	All Causes, By Age (Years)						P&I** Total
	All Ages	≥65	45-64	25-44	1-24	<1	
NEW ENGLAND	751	547	141	33	13	17	82
Boston, Mass.	193	123	50	9	4	7	25
Bridgeport, Conn.	51	35	12	2	2	-	5
Cambridge, Mass.	38	31	5	1	1	-	5
Fall River, Mass.	47	37	7	2	1	-	1
Hartford, Conn.	66	48	15	2	-	1	9
Lowell, Mass.	45	36	6	3	-	-	8
Lynn, Mass.	15	8	5	2	-	-	-
New Bedford, Mass.	27	22	5	-	-	-	2
New Haven, Conn.	55	43	6	4	-	2	1
Providence, R.I.	62	49	7	2	1	3	7
Somerville, Mass.	7	5	2	-	-	-	1
Springfield, Mass.	63	45	13	1	2	2	9
Waterbury, Conn.	30	25	4	1	-	-	5
Worcester, Mass.	52	40	4	4	2	2	4
MID ATLANTIC	3,482	2,402	691	257	55	74	204
Albany, N.Y.	58	43	9	-	1	5	2
Allentown, Pa.	22	15	7	-	-	-	1
Buffalo, N.Y.	161	120	28	8	2	3	9
Camden, N.J.	44	24	12	2	2	4	2
Elizabeth, N.J.	27	23	3	-	1	-	1
Erie, Pa.†	36	26	10	-	-	-	3
Jersey City, N.J.	40	29	10	-	-	1	1
N.Y. City, N.Y.	1,944	1,324	387	162	34	37	97
Newark, N.J.	92	48	17	19	2	3	6
Paterson, N.J.	48	33	10	3	1	1	3
Philadelphia, Pa.	502	341	106	37	4	14	32
Pittsburgh, Pa.†	102	79	18	3	-	2	5
Reading, Pa.	36	27	8	-	1	-	5
Rochester, N.Y.	116	91	12	9	3	1	14
Schenectady, N.Y.	38	29	6	2	1	-	4
Scranton, Pa.†	28	15	9	3	-	1	3
Syracuse, N.Y.	98	66	25	4	2	1	6
Trenton, N.J.	26	16	6	3	-	1	1
Utica, N.Y.	35	28	7	-	-	-	4
Yonkers, N.Y.	29	25	1	2	1	-	5
E.N. CENTRAL	2,331	1,680	387	130	51	82	143
Akron, Ohio	46	33	8	4	-	1	6
Canton, Ohio	50	42	6	-	1	1	7
Chicago, Ill.§	553	462	11	26	16	37	16
Cincinnati, Ohio	139	98	31	6	3	1	17
Cleveland, Ohio	154	96	31	13	4	10	8
Columbus, Ohio	127	86	25	10	2	4	14
Dayton, Ohio	128	84	35	6	1	2	5
Detroit, Mich.	292	184	61	26	8	13	15
Evansville, Ind.	41	31	8	1	-	1	4
Fort Wayne, Ind.	65	49	12	3	-	1	3
Gary, Ind.	31	20	8	3	-	-	1
Grand Rapids, Mich.	41	26	10	1	4	-	8
Indianapolis, Ind.	173	120	39	7	4	3	3
Madison, Wis.	54	32	15	5	1	1	7
Milwaukee, Wis.	130	96	23	6	1	4	5
Peoria, Ill.	47	32	13	-	-	2	9
Rockford, Ill.	51	38	11	2	-	-	4
South Bend, Ind.	44	32	12	-	-	-	3
Toledo, Ohio	69	44	15	6	3	1	5
Youngstown, Ohio	96	75	13	5	3	-	3
W.N. CENTRAL	743	532	127	39	28	17	30
Des Moines, Iowa	57	43	12	-	2	-	3
Duluth, Minn.	25	18	6	1	-	-	1
Kansas City, Kans.	36	27	6	2	1	-	1
Kansas City, Mo.	147	100	26	6	8	7	5
Lincoln, Nebr.	38	25	8	3	1	1	2
Minneapolis, Minn.	74	48	10	8	3	5	4
Omaha, Nebr.	93	66	20	3	4	-	10
St. Louis, Mo.	163	119	24	9	7	4	-
St. Paul, Minn.	48	38	6	3	1	-	-
Wichita, Kans.	62	48	9	4	1	-	4
S. ATLANTIC	1,316	838	273	93	35	68	75
Atlanta, Ga.	138	89	30	13	4	2	6
Baltimore, Md.	212	142	43	18	7	2	9
Charlotte, N.C.	94	61	25	3	1	4	7
Jacksonville, Fla.	140	82	32	4	6	16	7
Miami, Fla.	106	59	29	10	1	7	3
Norfolk, Va.	65	33	13	6	2	11	5
Richmond, Va.	77	51	19	3	1	3	7
Savannah, Ga.	37	23	8	5	1	-	1
St. Petersburg, Fla.	141	115	17	2	2	5	11
Tampa, Fla.	69	52	6	6	1	3	4
Washington, D.C.	212	114	47	21	8	14	11
Wilmington, Del.	25	17	4	2	1	1	4
E.S. CENTRAL	813	531	177	57	31	17	72
Birmingham, Ala.	158	101	38	9	4	6	11
Chattanooga, Tenn.	67	47	14	5	1	-	13
Knoxville, Tenn.	38	28	7	2	1	-	2
Louisville, Ky.	101	67	25	5	1	3	3
Memphis, Tenn.	182	120	37	14	10	1	18
Mobile, Ala.	91	52	23	7	4	5	8
Montgomery, Ala.	50	32	7	5	6	-	3
Nashville, Tenn.	126	84	26	10	4	2	14
W.S. CENTRAL	1,347	992	172	84	50	49	56
Austin, Tex.	86	52	15	12	3	4	4
Baton Rouge, La.	53	34	8	4	2	5	3
Corpus Christi, Tex.	58	36	14	5	-	3	1
Dallas, Tex.	192	122	34	23	9	4	4
El Paso, Tex.	52	36	9	3	2	2	1
Fort Worth, Tex.	87	63	14	2	2	6	6
Houston, Tex.§	311	278	6	5	11	11	6
Little Rock, Ark.	76	48	20	3	3	2	12
New Orleans, La.§	130	117	2	2	5	4	-
San Antonio, Tex.	159	104	30	13	9	3	9
Shreveport, La.	49	41	4	2	1	1	2
Tulsa, Okla.	94	61	16	10	3	4	8
MOUNTAIN	708	487	120	49	28	24	55
Albuquerque, N.Mex.	81	60	12	2	4	3	4
Colo. Springs, Colo.	37	27	8	-	1	1	9
Denver, Colo.	141	95	22	15	5	4	7
Las Vegas, Nev.	100	67	19	13	1	-	10
Ogden, Utah	21	17	3	-	1	-	2
Phoenix, Ariz.	138	92	32	7	5	2	4
Pueblo, Colo.	27	23	2	-	1	1	8
Salt Lake City, Utah	43	22	7	5	4	5	2
Tucson, Ariz.	120	84	15	7	6	8	9
PACIFIC	1,754	1,166	347	131	52	52	118
Berkeley, Calif.	22	14	5	3	-	-	1
Fresno, Calif.	77	61	7	5	3	1	10
Glendale, Calif.	14	12	1	1	-	-	-
Honolulu, Hawaii	70	45	15	5	1	4	9
Long Beach, Calif.	90	53	21	9	-	7	13
Los Angeles, Calif.	400	245	88	37	16	8	13
Oakland, Calif.	86	51	19	6	2	8	6
Pasadena, Calif.	20	15	4	-	-	1	-
Portland, Oreg.	121	92	21	3	2	3	4
Sacramento, Calif.	153	111	22	12	5	3	20
San Diego, Calif.	116	79	24	4	8	1	15
San Francisco, Calif.	162	95	38	21	4	4	4
San Jose, Calif.	172	114	38	13	4	3	11
Seattle, Wash.	140	95	26	8	5	6	2
Spokane, Wash.	72	53	12	3	2	2	8
Tacoma, Wash.	39	31	6	1	-	1	2
TOTAL	13,245††	9,175	2,435	873	343	400	835

* Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

** Pneumonia and influenza.

† Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

†† Total includes unknown ages.

§ Data not available. Figures are estimates based on average of past 4 weeks.

TABLE 5. Clinical manifestations and causes of central nervous system (CNS) conditions

Condition	Symptoms	Signs	Latency	Prognosis following exposure cessation	Major neurotoxic substances
Acute conditions					
Acute intoxication	Dizziness, lightheadedness, balance and gait impairment, incoordination, feeling "high."	Ataxia, slow psychomotor function.	Minutes-hours	Reversible	Organic solvents, inhalation anesthetics
Acute toxic encephalopathy	Obtundation, coma, seizures, potentially fatal.	Signs of diffuse CNS depression, reflex slowing, EEG slowing.	Hours-days	Persistent deficits common	Solvents, lead, pesticides
Chronic syndromes					
Symptoms only	Mood changes (irritability, depression), sleep disorders; difficulty concentrating; memory complaints; symptoms are more noticeable to relatives than to patient.	No objective signs.	Weeks-months	Reversible	Carbon disulfide, lead, organic solvents
Mild chronic toxic encephalopathy					
Organic personality or mood disorders	Similar to those noted above but of greater frequency and severity.	Alterations in mood or personality.	Weeks-months	Incomplete reversibility possible but uncommon	Lead, organic solvents
Neurobehavioral impairment	Symptoms as above.	Reduced motor speed, reduced vigilance and reaction time, plus reduced performance on memory (short-term) testing and other tests of cognitive function (i.e., visuospatial ability).	Weeks-months	Potentially reversible, partial or complete	Carbon disulfide, lead, organic solvents, possibly carbon monoxide
Severe chronic toxic encephalopathy (dementia)	Significant loss of ability to perform activities of daily living; difficulty in comprehension, profound memory loss, reduced verbal fluency.	Testing compatible with severe neurologic damage and neuropsychologic impairment as seen in dementia.	Unknown	Poorly reversible	Lead, organic solvents

Work-Related Diseases and Injuries — Continued

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TABLE 6. Other neurologic effects

Health effects	Agents
Motor and gait disorders	
Ataxia	Acrylamide Chlordane Chlordecone DDT *n*-Hexane Manganese Mercury (especially methyl mercury) Methyl *n*-butyl ketone Methyl chloride Toluene
Myoclonus	Benzene hexachloride Mercury
Paraplegia	Organotin compounds
Parkinsonism	Carbon disulfide Carbon monoxide Manganese
Seizures	Lead Organic mercurials Organochlorine insecticides Organotin compounds
Tremor	Carbon disulfide Chlordecone DDT Manganese Mercury
Visual-system effects	
Nystagmus	Mercury
Opsoclonus	Chlordecone
Constricted visual field	Mercury
Impaired visual acuity	*n*-Hexane Mercury Methanol

Work-Related Diseases and Injuries — Continued

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Epidemiologic Notes and Reports

Reported Contamination of Heparin Sodium with *Pseudomonas putida*

On three occasions, from December 1985 to January 1986, *Pseudomonas putida* was isolated from routine surveillance cultures of bone marrow harvested from three donors at a single hospital in Minnesota. Cultures of all materials added to bone marrow at the time of collection were performed by the hospital. Eight of 70 unopened 5-ml glass ampules of a single lot (#84339) of heparin sodium without preservatives (manufactured for O'Neal, Jones & Feldman Pharmaceuticals, St. Louis, Missouri, by Torigian Laboratories, Queens Village, New York) were culture-positive for *P. putida*. Heparin was added to the marrow as an anticoagulant during the collection procedure. The hospital received lot #84339 in April 1985, but it was not used until November 1985.

Two of the three contaminated marrow specimens had been administered to recipients before the culture results were known. Neither recipient had blood cultures positive for *P. putida* or clinical signs of bacteremia, although antibiotic therapy was begun for both patients approximately 24 hours after transplantation.

Investigations of *P. putida* bloodstream infections involving three other patients from two additional hospitals are ongoing. One patient, a 31-year-old female, developed *P. putida* bacteremia in July 1985, 7 days after receiving an allogeneic bone-marrow transplant. Harvested bone marrow had been mixed with heparin sodium without preservatives. The other two patients were neonates in a single hospital during July and August 1985. Their blood cultures were drawn through umbilical artery catheters and grew organisms identified as either *P. putida* or *P. fluorescens*. The catheters had been flushed with heparin sodium without preservatives. The lot numbers of heparin used on these three patients were not recorded, although the source of the product was the same as that for the Minnesota hospital.

Reported by S Cameron, BA Juni, N Van Drunen, S Reaney, S Fautsch, L Lasky, D Hurd, F Rhame, University of Minnesota Hospital, Minneapolis, M Osterholm, State Epidemiologist, Minnesota Dept of Health; J Bartley, R Voravit, T Rehder, W Palutke, Harper Hospital, Detroit, S Connolly, H Moore, D Ekdom, Blodgett Memorial Medical Center, Grand Rapids, K Wilcox, State Epidemiologist, J Weber, Nosocomial Epidemiologist, Michigan Dept of Public Health; Hospital Infections Program, Center for Infectious Diseases, CDC.

Editorial Note: *P. putida* is a glucose nonfermenting gram-negative rod that has only rarely been associated with clinical infection. *P. putida* has many biochemical characteristics similar to *P. flourescens* (*1*). Heparin sodium without preservatives may be selected for use in clinical

Contamination of Heparin Sodium – Continued

situations in which preservatives might have undesirable effects, such as for maintaining patency of intravenous catheters in neonates or anticoagulation of bone marrow harvested for transplantation.

After receiving the report of apparent *P. putida* contamination of heparin ampules from the hospital in Minnesota, the U.S. Food and Drug Administration (FDA) notified the product's distributor. The distributor voluntarily contacted purchasers of lot #84339, indicating that ampules of this lot should not be used until further notice. CDC, FDA, the distributor, and the manufacturer are performing cultures to detect potential contamination of other heparin ampules.

Hospitals that have identified patients with *P. putida* bloodstream infections in the past year are requested to report their findings through local and state health departments to CDC's Hospital Infections Program, telephone (404) 329-3406.

Reference

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Current Trends

Update: Influenza Activity – United States

Reports of influenza viruses in the United States isolated by the collaborating diagnostic laboratories have increased sharply, with over 200 viruses identified each week since the end of January 1986. Overall, approximately 80% of the reported viruses have been type B, but more type A(H3N2) than type B viruses have been identified among persons older than 64 years. Of type B viruses, 66.3% have been isolated from persons under 19 years old, and 3.2%, from persons over 64 years old. In comparison, 45.9% of type A(H3N2) cases occurred among persons under 19 years old; 26.1% occurred among persons over 64 years old. Forty-five states have now reported type B virus isolates; 29 states, type A(H3N2) isolates; and 28 states, both types.

For the week ending February 22, 18 states reported widespread outbreaks of influenza-like illness, and 15 states and the District of Columbia reported regional outbreaks. For the preceding week, 37 states had reported outbreak status, more than for any week since January 1981. Tallies of patients with influenza-like illnesses seen by the network of family physicians* nationwide averaged 10.9 cases for the reporting week ending February 12, compared with the 11.5 average for the preceding week and the maximum values of 11-12 cases for the two preceding seasons (Figure 1).

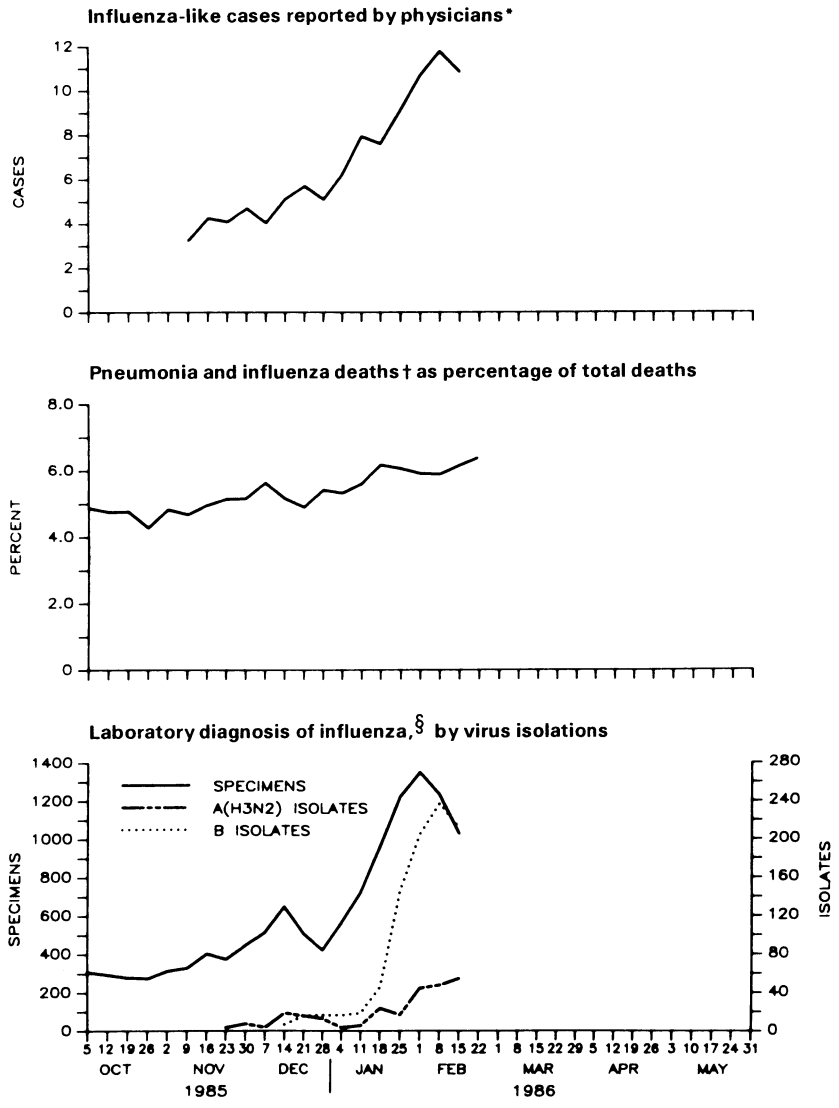
The percentage of pneumonia and influenza deaths reported from the 121 U.S. cities for the week ending February 22 was 6.3%, compared with 6.2% for the preceding week (Figure 1).

Reported by State and Territorial Epidemiologists; State Laboratory Directors; Statistical Svcs Br, Div of Surveillance and Epidemiologic Studies, Div of Field Svcs, Epidemiology Program Office, WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

*Cases reported by those members of the American Academy of Family Physicians Research Panel who serve as sentinel physicians for influenza.

Influenza — Continued

FIGURE 1. Indicators of influenza activity, by week — United States, 1985-1986

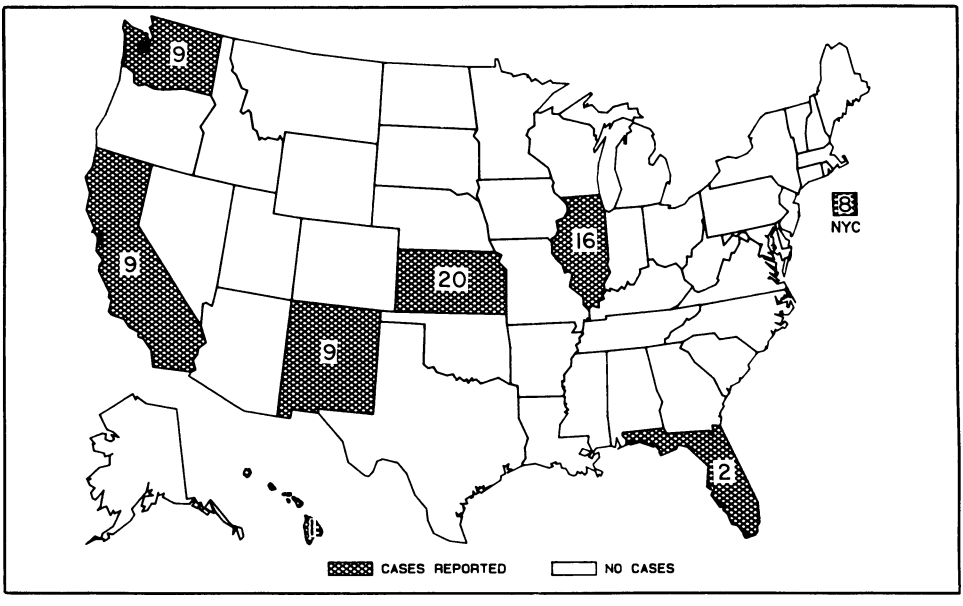


*Reported to CDC by approximately 125 physician-members of the American Academy of Family Physicians. A case was defined as a patient with fever 37.8 C (100 F) or greater and at least cough or sore throat.

†Reported to CDC from 121 cities in the United States. Pneumonia and influenza deaths include all deaths where pneumonia is listed as a primary or underlying cause or where influenza is listed on the death certificate.

§Reported to CDC by WHO Collaborating Laboratories (including military sources).

FIGURE I. Reported measles cases — United States, weeks 4-7, 1986



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The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday.

The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: ATTN: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

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